



2020 Predictions

RFG Perspective: The global economic and geopolitical environments will be more positive than negative for most countries, which will make for more constrained IT budgets in 2020. Additionally, the disintermediation impacts of the digital economy, trade disruptions and tariffs will continue to disrupt businesses – and whole industries – that must be addressed by corporate executives before their firms' revenues are usurped by new or transformed competitors. To address these challenges, business and IT executives must re-examine their culture, people and processes as well as the impacts caused by external pressures. Externally, IT executives will have to work with non-IT teams to improve and restructure processes to address the business requirements underlying the need for more collaborative, interactive, personalized, and predictive real-time information using AI, analytics, IoT, mass personalization and mobility. Simultaneously, IT executives will have to address the data integrity and privacy and service level concerns that impact business outcomes, productivity, revenues and security so that there is more confidence in IT and the organization as a whole. Internally, IT executives will need to increase their focus on analytics, automation, componentization, machine learning, operations effectiveness, orchestration, privacy, and security so that IT can deliver more and better offerings quicker and at a lower cost while protecting the organization from cybersecurity attacks and vulnerabilities.

The United States will experience another positive year, at least until the election, which could prove disruptive, depending upon the results. Outside of the U.S., the majority of countries will see positive growth while a few will retrench. The Trump administration's tariff actions have disrupted the Chinese supply chain and companies are moving their manufacturing firms to other low-cost countries or back home. China can be expected to respond but the damage has been done. Further tensions and disruptions are expected globally, and the global growth impact could be substantial. The Brexit saga will come to an end and the UK will need to rapidly put policies and procedures in place if they are to avoid a downturn. The rest of the EU will muddle along. Turmoil in the Middle East and the West's war of words with China and Russia are adding to the waves of insecurity. Uncertainties in multiple Latin American countries will impact investment decisions and growth prospects as well. Moreover, regulations such as the general data protection regulation (GDPR) and its equivalents in California and Canada, and cybersecurity breaches like those at Capital One and Facebook are forcing businesses to reconsider their culture, processes and views on privacy and security. Therefore, executives must invest in transforming their business and drive process improvements to remain competitive, help contain costs, enhance compliance, minimize risks, ensure privacy, and improve resource utilization. Below are five areas that will be focal points in 2020.

Cloud/Edge/IoT – First it was “cloud,” then it moved to hybrid cloud, and multi-cloud. 2019 saw the beginnings of a shift to IoT and then edge. The server/storage topography continues to evolve, making it difficult for IT executives and architects to construct application and data architectures that can survive long-term. New methods of abstraction, orchestration, and portability will be needed to address these growing issues before companies find themselves once again locked into legacy cloud solutions with islands of data that are out of control. Thus, while there will be more cloud, edge, and IoT movement, the business impacts and results will be mixed.



Compliance - Privacy – GDPR is in effect and British Airways and Marriott have already been hit with mega-fines; more to come in 2020. California’s consumer privacy act (CCPA) will go live in 2020. While there are similarities between CCPA, GDPR and the Canadian Privacy Act, there are significant differences. Expect other countries (and U.S. states) to pass their own privacy acts, creating a patchwork of requirements that firms will struggle to adhere to. In addition, organizations will likely have to conform with the EU’s ePrivacy law (the “cookie law”) as well as PSD2 standards, which are still evolving. Thus, in 2020 IT executives will be hard pressed to keep up with compliance requirements globally while improving users' support for compliance. IT executives will need to work with auditors and regulators to develop better proactive processes that reduce the cost of compliance and risk exposure.

DevSecOps – The trend toward DevOps and DevSecOps will gain momentum in 2020 but progress will remain slow. The challenge is not the technology, of which there is much to implement, but overcoming the organizational resistance to change as well as the acceptance of new, and expanded, roles and responsibilities for developers. The incorporation of security into DevOps (into DevSecOps) so that security does not become a bottleneck will not be easy, as enterprises struggle finding the right set of tools for new application code scans and tests, and regression testing. Success has been limited by not having the right metrics in place and monitoring progress throughout the year. Until this is corrected, progress will be limited.

Digital Transformation – The digital economy is disintermediating every industry in every geography with no end in sight. More and more business will be done digitally. However, the phrase “digital transformation” suffers from having no common definition. In reality it is all about innovation. Companies need to keep reinventing themselves or suffer the consequences. Those that provide innovative leadership will garner market share from the laggards, who are jeopardizing the survival of their enterprises. 2020 will see further examples of visionary firms gaining market share while firms sticking to business as usual (with or without IT-only enhancements) struggle to compete. Furthermore, Artificial Intelligence (AI) is a required component to almost all new solutions. Like digital transformation/innovation, it is ubiquitous and a prerequisite for most new applications that it can be superfluous to call it out in most cases. That said, there are a few areas where AI options are visible – robotic process automation, virtual agents, machine learning, deep learning, and reinforcement inference learning.

Security – The use of analytics, and machine learning will help improve real-time analysis, but cybersecurity breaches will still be a major challenge in 2020. The Capital One and Facebook breaches (and by association, the cloud service providers (CSPs)) continue to demonstrate that companies (and governments) still have significant holes in their cybersecurity structures. Moreover, the successful ransomware attacks have emboldened more attacks, especially at government agencies. 2020 will produce more of the same, with the average financial impact increasing. On top of that, most users remain oblivious to the impacts caused by poor email practices, use of insecure mobile apps, and insecure IoT devices. It is evident from examining the breaches that organizations have



less of a technology problem than people and process failures (including the application of configurations, encryption, patches, and quality code). Companies need to re-imagine their security practices from all angles and clean up their technical debt. Furthermore, the lack of CSP transparency remains an issue and an exposure in 2020, especially since the CSPs feel they offer secure platforms and the breaches are caused by customers' failures.

Summary

The paradigm shift to a digital economy is not a technology issue – it is a business model transformation. Business executives cannot leave these decisions to IT executives or business/technology consultants. Executives need to determine what businesses they wish to be in, create the strategies, and then have the processes and applications designed and implemented. This is a multi-year initiative with a lot of moving parts.

RFG POV: 2020 will be another challenging year for IT executives. IT needs to work harder to integrate itself with the business and work collaboratively to enhance operations (whether onsite, in the cloud, or at the edge) and innovate new, simpler approaches for doing business. Additionally, IT executives will need to invest in DevSecOps and other process improvements to help contain costs, enhance compliance, increase flexibility and responsiveness, minimize risks, and improve resource utilization. IT executives should collaborate with business and financial executives so that IT budgets, plans and strategies dovetail with the business and remain tightly integrated with the business throughout the year.

Additional relevant research is available at www.rfgonline.com. Interested readers should contact RFG Client Services to arrange further discussion or interview with Mr. Cal Braunstein.